

REMARKS

Favorable reconsideration is respectfully solicited.

Claims 1-12 remain active in the application.

Applicants wish to thank Examiners Pahng and Banks for the courtesy of an interview on October 4, 2005 at which time the outstanding Office Action was discussed. Specifically, Applicants proposed additional claim amendments responsive to the rejection of the claims under 35 U.S.C. § 112. Although no explicit agreement was reached, it is Applicants' understanding that the Examiners consider that the amendments discussed at that time appear to overcome this rejection. Additionally, the Examiners indicated that they would telephone the undersigned attorney if additional amendments were required.

The Examiners indicated that the amendment of the present response would be entered.

With respect to the rejection of Claims 1-12 under 35 U.S.C. § 102 as being anticipated by Savolainen, Applicants explained during the interview that this reference fails to teach the critical relationships of the stationary liner and the mantle liner set forth in the claims. For example, the claimed cone crusher is configured to reduce uneven abrasion and increase the throughput of products. To this end, referring to the non-limiting embodiment for ease of reference, the length of a perpendicular L1 between a first tapered surface 3a of the mantle liner 3 and the first area surface 2a of the stationary liner 2, at the inlet side of the first portion 11 in which the material is crushed, is greater than "T". Crush material having a charging raw material size of T can therefore be inserted therein (page 3, lines 18-21). Moreover, since the length of the first area surface 2a of the stationary liner 2 is up to about the square root of 2 times T, the first area surface has a length suitable for receiving the crush material as a single particle (page 3, lines 22-24). Moreover, since a cross angle between the first tapered surface 3a and the first area surface 2a is less than 20°, the crushed material may

be well received by the first tapered surface together with the first area surface (page 3, lines 24-27). Additionally, since the inclination angle of the first tapered surface 3a with respect to the horizontal is greater than 60° , the crushed material may be securely transferred to the next stage (page 3, lines 27-29). Hence, each particle in the crushed material may be received directly by the stationary liner and the mantle liner, and a proper crushing due to the single particle compression resulting from a press force between the liners can be carried out (see paragraph bridging pages 3-4).

The second area or region 12 has characteristics such that the crush material which has been crushed in the first area is stacked between the stationary liner 2 and the mantle liner 3, when these liners are away from each other, and further when changing from the separation state to the approach state, a reduction in the space factor between the particles in the crush material provides multiple particle contact, thereby making it possible to crush the crush material on the basis of the particle layer compression, where the crushing starts at contact portions between particles (page 4, lines 15-23).

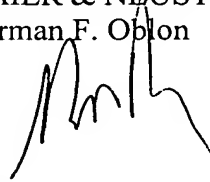
In the third area or region 13, the crush material may be discharged at an optimal final traveling speed. As a result, the crush material may be discharged as a high quality product from the outlet of the crushing chamber and a greater amount of the crush material may be discharged without clogging up due to a reduced spacing between particles in the crush material (paragraph bridging pages 4-5).

Although no explicit agreement was reached regarding the prior art rejection, it is Applicants' understanding that the rejection based on Savolainen would be withdrawn, but that a further search for prior art teaching the claimed relationships of the stationary liner and the mantle liner would be performed.

Applicants therefore believe that the present application is in condition for allowance
and respectfully solicits an early notice of allowability.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.
Norman F. Oblon



Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 06/04)

Robert T. Pous
Attorney of Record
Registration No. 29,099